

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:48

First Dose M/F: NA / NA

Lab: NCTR

C Number: MG96005

Lock Date: Not Entered.

Cage Range: All

Date Range: All

Reasons For Removal: All

Removal Date Range: All

Treatment Groups: All

Study Gender: Both

PWG Approval Date NONE

Experiment Number: 99930-93

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First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Male F3 0PPM | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 6 | 0 | 6 | 9 | 9 | 9 | 0 | 5 | 8 | 0 | 0 | 3 | 6 | 6 | 8 | 9 | 2 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 0 | 2 | 8 | 4 | 7 | 7 | 6 | 0 | 1 | 6 | 9 | 5 | 2 | 5 | 3 | 5 | 9 | 2 | 4 | 1 | 1 | 1 | 1 | 0 | 2 | 2 | 5 | 5 | 4 | 4 |
| | | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | | | | X | | | | | |
| Heart | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pericardium, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | | | | X | | | | | |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| Adrenal Cortex | A | + | + | A | + | + | + | A | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Adrenal Medulla | A | + | + | A | + | + | + | A | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Islets, Pancreatic | A | M | I | + | + | + | + | A | + | + | M | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | X | | | | | | | | |
| Parathyroid Gland | I | + | + | + | + | + | + | + | + | + | M | I | + | + | + | + | M | + | + | M | + | M | + | M | + | M | + | M | + | M | + | | |
| Pituitary Gland | A | + | + | A | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Pars Distalis, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pars Distalis, Adenoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | + | + | A | A | + | A | + | A | + | + | M | + | + | + | + | A | A | + | M | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Bilateral, C Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | X | | | | | | | | |

General Body System

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:48
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male F3 0PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 2 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 6 | 0 | 6 | 9 | 9 | 9 | 0 | 5 | 8 | 0 | 0 | 3 | 6 | 6 | 8 | 9 | 2 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | |
| | | 0 | 2 | 8 | 4 | 7 | 7 | 6 | 0 | 1 | 6 | 9 | 5 | 2 | 5 | 3 | 5 | 9 | 2 | 4 | 1 | 1 | 1 | 0 | 2 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 6 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | | 5 | 0 | 2 | 4 | 4 | 4 | 5 | 0 | 3 | 9 | 9 | 5 | 9 | 1 | 4 | 2 | 3 | 4 | 4 | 7 | 7 | 7 | 7 | 9 | 4 |
| | | 5 | 4 | 6 | 4 | 6 | 7 | 1 | 6 | 9 | 5 | 6 | 1 | 8 | 3 | 3 | 2 | 8 | 7 | 8 | 0 | 1 | 2 | 3 | 4 | 0 |

NONE

Genital System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Coagulating Gland | A | A | A | A | + | + | + | A | + | + | M | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | |
| Epididymis | + | A | + | + | + | + | + | + | + | + | M | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | |
| Preputial Gland | + | + | + | A | + | + | + | + | + | + | M | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | |
| Prostate | | | | | + | + | | | | | M | + | | | | | | | | | | | | | | | |
| Prostate, Dorsal Lobe | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Prostate, Ventral Lobe | + | + | A | + | + | + | + | + | + | + | M | + | + | + | M | + | + | A | + | + | + | + | + | + | + | + | |
| Rete Testes | + | + | + | + | M | M | + | + | + | + | M | + | + | + | + | + | M | M | + | + | + | + | + | + | + | + | |
| Seminal Vesicle | A | A | A | A | + | A | + | A | + | A | M | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | |
| Testes | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Interstit Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| Seminoma Benign | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Hematopoietic System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone Marrow | + | + | + | + | + | A | + | A | + | + | M | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node | + | + | | | | | | | | | | | | | | | | A | + | | | | | | | | |
| Lymph Node, Mandibular | + | + | + | + | + | A | + | + | + | + | M | + | + | + | A | A | + | + | + | + | + | + | + | + | + | | |
| Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| Lymph Node, Mesenteric | A | + | A | + | + | A | + | + | + | + | M | + | + | + | A | A | + | A | + | + | + | + | + | + | + | + | |
| Spleen | + | + | + | + | + | + | + | A | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/17/2014

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 12:52:49

CAS Number: 446-72-0

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Male F3 0PPM | DAY ON TEST ANIMAL ID | Systemic Lesions Abridged | | | | | | | | | | | | | | | | | | | | |
|---|--------------------------|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | Neoplasms by Individual Animal | | | | | | | | | | | | | | | | | | | | |
| | | Thymus | | | | | | | | | | | | | | | | | | | | |
| | | A | + | + | + | + | + | A | + | + | + | + | M | + | + | A | A | + | + | + | + | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 2 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | 6 | 0 | 6 | 9 | 9 | 9 | 0 | 5 | 8 | 0 | 0 | 3 | 6 | 8 | 9 | 2 | 4 | 4 | 5 | 5 | |
| Integumentary System | | 0 | 2 | 8 | 4 | 7 | 7 | 6 | 0 | 1 | 6 | 9 | 5 | 2 | 5 | 3 | 5 | 9 | 2 | 4 | 1 | |
| Mammary Gland | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Skin | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Keratoacanthoma | | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 6 | 9 | 9 | 9 | 9 | 9 | |
| Schwannoma Malignant | | 5 | 0 | 2 | 4 | 4 | 4 | 5 | 0 | 3 | 9 | 9 | 5 | 9 | 1 | 4 | 2 | 3 | 4 | 4 | 7 | |
| Squamous Cell Carcinoma | | 5 | 4 | 6 | 4 | 6 | 7 | 1 | 6 | 9 | 5 | 6 | 1 | 8 | 3 | 3 | 2 | 8 | 7 | 8 | 0 | |
| Musculoskeletal System | | X | | | | | | | | | | | | | | | | | | | | |
| Bone, Cranium | | X | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | | + | A | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | |
| Skeletal Muscle | | + A | + | + | + | + | + | A | + | + | M | + | + | + | + | + | + | + | + | + | + | |
| Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | X | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | X | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | | A | + | + | A | A | + | + | A | + | + | M | + | + | + | A | + | + | + | + | + | |
| Brain, Cerebellum | | A | + | + | A | + | + | A | + | + | M | + | + | + | A | + | + | + | + | + | + | |
| Astrocytoma Malignant | | X | | | | | | | | | | | | | | | | | | | | |
| Brain, Cerebrum | | A | + | + | A | A | + | + | A | + | + | M | + | + | + | A | + | + | + | + | + | |
| Astrocytoma Malignant | | X | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

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Date Report Requested: 10/17/2014

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First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Male F3 0PPM | DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 5 5 5 5 5 5 5 5 5 6 6 6 4 4 3 3 3 3 2 5 4 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 0 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 9 3 3 3 3 3 3 3 3 5 7 7 7 7 7 8 8 8 8 9 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 9 0 1 2 3 4 5 6 4 5 6 7 8 9 0 1 2 9 9 0 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | X | | | | | 1 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38 | |
| Leiomyosarcoma | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | X | | | | | 2 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 | |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Hepatocellular Adenoma | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Hepatocellular Carcinoma | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 44 | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

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First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Male F3 0PPM | DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | 7 | 5 | 5 5 5 5 5 5 5 5 5 6 6 6 4 4 3 3 3 3 2 5 4 5 | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | | | | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | | | | |
| | 0 0 1 | | | | | | | | | | | | | | | | | | | | |
| | 9 9 3 3 3 3 3 3 3 3 5 7 7 7 7 7 8 8 8 8 9 0 | | | | | | | | | | | | | | | | | | | | |
| | 8 9 0 1 2 3 4 5 6 4 5 6 7 8 9 0 1 2 9 9 0 9 | | | | | | | | | | | | | | | | | | | | |
| | | *TOTALS | | | | | | | | | | | | | | | | | | | |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 51 | |
| Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 51 | |
| Pericardium, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | | 1 |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Pheochromocytoma Benign | X | X | X | | | | | | | | | | | | | | | | | | | X | 4 |
| Pheochromocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | + | + | + | 45 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | 3 |
| Parathyroid Gland | + | + | + | M | + | I | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Pars Distalis, Adenoma | | | | | | | | | | | | | | | | | | | | | | X | 16 |
| Pars Distalis, Adenoma, Multiple | | | | | | | | | | | | | | | | | | | | | | X | 1 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 44 | |
| Bilateral, C Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | 1 |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | 1 |

General Body System

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:49

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Male F3 0PPM | DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | 7 | | | | | | | | | | | | | | | | | | | | |
| | | 5 | | | | | | | | | | | | | | | | | | | | |
| | | 5 5 5 5 5 5 5 5 5 6 6 6 4 4 3 3 3 3 2 5 4 5 | | | | | | | | | | | | | | | | | | | | |
| | | 0 | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | | 1 | | | | | | | | | | | | | | | | | | | | |
| 0 0 1 | | 0 0 1 | | | | | | | | | | | | | | | | | | | | |
| 9 9 3 | | 5 7 | | | | | | | | | | | | | | | | | | | | |
| 8 9 0 1 2 3 4 5 6 4 5 6 7 8 9 0 1 2 9 9 0 1 2 9 | | 6 7 8 9 0 1 2 9 9 0 1 2 9 9 0 1 2 9 9 0 1 2 9 9 0 1 | | | | | | | | | | | | | | | | | | | | |

*TOTALS

NONE

Genital System

| | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Coagulating Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 44 |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Prostate | | | | | | | | | | | | | | | | | | | | | | 6 |
| Prostate, Dorsal Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 51 |
| Prostate, Ventral Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Rete Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Interstit Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | 1 |
| Seminoma Benign | | | | | | | | | | | | | | | | | | | | | | 1 |

Hematopoietic System

| | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Lymph Node | + | | | | | | | | | | | | | | | | | | | | | 13 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | 1 |
| | | | | | | | | | | | | | | | X | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:49

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Male F3 0PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | *TOTALS | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|---------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | *TOTALS |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 46 |
| Adventitia, Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 39 |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Keratoacanthoma | | | | | | | | | | | | | | | | | X | | | | | | 1 |
| Schwannoma Malignant | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Cranium | | | | | | | | | | | | | | | | | + | | | | | | 2 |
| Bone, Femur | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Fibrous Histiocytoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Brain, Cerebellum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Astrocytoma Malignant | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Brain, Cerebrum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Astrocytoma Malignant | | | | | | | | | | | | | | | X | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
Test Type: SPECIAL STUDY
Route: DOSED FEED
Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
Time Report Requested: 12:52:50
First Dose M/F: NA / NA
Lab: NCTR

CD Rat Male
F3 5PPM TO CTL

| DAY ON TEST | CD Rat Male | | | | | | | | | | | | | | | | | | | |
|-------------|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | F3 5PPM TO CTL | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 2 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 0 | 9 | 2 | 7 | 8 | 9 | 1 | 9 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 4 | 5 | 2 | 0 | 7 | 3 | 7 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 5 | 4 | 4 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| 0 | 0 | 1 | 2 | 2 | 2 | 3 | 5 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 |
| 2 | 5 | 7 | 2 | 7 | 8 | 1 | 6 | 7 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 9 | 4 | 4 | 5 | 5 |
| 0 | 9 | 7 | 7 | 2 | 2 | 2 | 0 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 2 | 3 | 4 | 5 | 0 |
| | | | | | | | | | | | | | | | | | | 1 | 2 | 3 |
| | | | | | | | | | | | | | | | | | | 4 | 5 | 6 |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum | + | A | A | A | A | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon | + | A | A | A | A | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum | | | | | | | | | A | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum | + | A | A | A | A | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | + | A | A | A | A | A | A | A | + | + | + | A | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | A | A | A | A | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | + | A | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + |

Hepatocellular Carcinoma

X

| | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mesentery | + | + | + | | | | | | | | | | | | | | | | | |
| Pancreas | + | + | + | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Salivary Glands | + | + | + | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach | + | A | + | A | A | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Glandular | + | A | A | A | A | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | A | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Adrenal Medulla | + | + | + | A | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:50
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male F3 5PPM TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 2 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 8 | 9 | 2 | 7 | 8 | 9 | 1 | 9 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 4 | 5 | 2 | 0 | 7 | 3 | 7 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 5 | 4 | 4 | |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | |
| | | 0 | 0 | 1 | 2 | 2 | 2 | 3 | 5 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | |
| | | 2 | 5 | 7 | 2 | 7 | 8 | 1 | 6 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 9 | 9 | 9 | 4 | 4 | 5 | |
| | | 0 | 9 | 7 | 7 | 7 | 2 | 2 | 0 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 8 | 9 | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | X | |
| Islets, Pancreatic | | | | | | | | | | | | | | | | | | | | | | X | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | X | |
| Parathyroid Gland | | | | | | | | | | | | | | | | | | | | | | X | |
| Pituitary Gland | | | | | | | | | | | | | | | | | | | | | | X | |
| Pars Distalis, Adenoma | | | | | | | | | | | | | | | | | | | | | | X | |
| Thyroid Gland | | | | | | | | | | | | | | | | | | | | | | X | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | X | |
| Tissue NOS | | | | | | | | | | | | | | | | | | | | | | X | |
| Abdominal, Sarcoma | | | | | | | | | | | | | | | | | | | | | | X | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | X | |
| Coagulating Gland | | | | | | | | | | | | | | | | | | | | | | X | |
| Epididymis | | | | | | | | | | | | | | | | | | | | | | X | |
| Preputial Gland | | | | | | | | | | | | | | | | | | | | | | X | |
| Prostate | | | | | | | | | | | | | | | | | | | | | | X | |
| Prostate, Dorsal Lobe | | | | | | | | | | | | | | | | | | | | | | X | |
| Prostate, Ventral Lobe | | | | | | | | | | | | | | | | | | | | | | X | |
| Rete Testes | | | | | | | | | | | | | | | | | | | | | | X | |
| Seminal Vesicle | | | | | | | | | | | | | | | | | | | | | | X | |
| Testes | | | | | | | | | | | | | | | | | | | | | | X | |
| Interstit Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | X | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:50

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 5PPM TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | |
|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 2 | 5 | 5 | 5 | 5 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 8 | 9 | 2 | 7 | 8 | 9 | 1 | 9 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 4 | 5 | 2 | 0 | 7 | 3 | 7 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 5 | 4 |
| Lung | + | A | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | X | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | |
| Carcinoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | |
| Nose | + | + | A | A | A | A | + | A | A | + | + | + | + | + | + | + | + | + | + | + |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | |
| Trachea | + | A | A | A | A | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Special Senses System | | | | | | | | | | | | | | | | | | | | |
| Eye | | | | | | | A | | A | + | + | + | + | + | + | + | + | + | + | + |
| Retrobulbar, Carcinoma | | | | | | | | | | | | | | | | | | | | X |
| Harderian Gland | | | | | | | | | | + | + | + | + | + | + | + | + | + | + | + |
| Lacrimal Gland | | | | | | | | | | + | + | + | + | + | + | + | + | + | + | + |
| Urinary System | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Urethra | | | | | | | | | | | | | | | | | | | | + |
| Urinary Bladder | + | A | + | A | A | A | + | A | + | + | + | + | + | + | M | + | + | + | + | + |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | X |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:51
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F3 5PPM TO CTL

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | | | | | | | | | | | | | | | | | |
| | 5 | | | | | | | | | | | | | | | | | |
| | 4 5 5 5 5 5 4 4 5 4 5 4 4 4 1 1 0 0 1 | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 7 | 0 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 8 | 0 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 42 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 42 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Hepatocellular Carcinoma | | | | | | | | | | | | | | | | | | 1 |
| Mesentery | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |

Endocrine System

| | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:51
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male F3 5PPM TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | *TOTALS |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Pheochromocytoma Benign | | X | | | | | | | | | | | | | | | | | | 3 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenoma | | X | | | | | | | | | | | | | | | | | | 3 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | 46 |
| Pituitary Gland | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Pars Distalis, Adenoma | | X | X | X | X | X | | | | | | X | X | X | | | | | | 18 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| General Body System | | | | | | | | | | | | | | | | | | | | |
| Tissue NOS | | | | | | | | | | | | | | | | | | | | 1 |
| Abdominal, Sarcoma | | | | | | | | | | | | | | | | | | | | 1 |
| Genital System | | | | | | | | | | | | | | | | | | | | |
| Coagulating Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Prostate | | + | | | | | | | | | | | | | | | | | | 8 |
| Prostate, Dorsal Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Prostate, Ventral Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Rete Testes | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Interstit Cell, Adenoma | | | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:51

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 5PPM TO CTL**

| DAY ON TEST | CD Rat Male | | | | | | | | | | | | | | | | | |
|-------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 1 | 1 | 0 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 7 | 0 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 8 | 0 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

TOTALS*Hematopoietic System**

| | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Lymph Node | + | + | + | | | | | | | | | | | | | | | 9 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Sarcoma | | | | | | | | | | | | | | | | | | 1 |
| Thymus | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | M | 45 |

Integumentary System

| | | | | | | | | | | | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Fibroma | | | | | | | | | | | | | | | | | | 1 |

Musculoskeletal System

| | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

Nervous System

| | | | | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Astrocytoma Malignant | | | | | | | | | | | | | | | | | | 1 |

Respiratory System

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:51

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 5PPM TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 4 | 5 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 1 | 1 | 0 | 0 | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | X 1 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 44 | |
| Special Senses System | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 | |
| Retrobulbar, Carcinoma | | | | | | | | | | | | | | | | | | | 1 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 | |
| Lacrimal Gland | | | | | | | | | | | | | | | | | | | 2 |
| Urinary System | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Urethra | | | | | | | | | | | | | | | | | | | 2 |
| Urinary Bladder | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | 43 | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:51
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F3 100PPM TO CTL

| DAY ON TEST | CD Rat Male | | | | | | | | | | | | | | | | | | | |
|-------------|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | F3 100PPM TO CTL | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 |
| 1 | 5 | 3 | 2 | 4 | 5 | 5 | 7 | 9 | 4 | 5 | 6 | 6 | 8 | 8 | 0 | 1 | 3 | 5 | 5 | 5 |
| 2 | 1 | 8 | 7 | 4 | 0 | 5 | 0 | 3 | 5 | 9 | 6 | 5 | 1 | 0 | 2 | 5 | 7 | 1 | 1 | 2 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 5 | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 7 | 9 | 9 | 9 | 9 | 9 |
| 6 | 1 | 8 | 8 | 0 | 0 | 1 | 2 | 7 | 6 | 8 | 0 | 0 | 3 | 4 | 8 | 3 | 4 | 8 | 8 | 9 |
| 7 | 6 | 9 | 8 | 3 | 7 | 4 | 8 | 9 | 7 | 6 | 2 | 3 | 7 | 0 | 1 | 4 | 6 | 3 | 4 | 5 |
| 8 | 9 | 8 | 3 | 7 | 4 | 8 | 9 | 7 | 6 | 2 | 3 | 7 | 0 | 1 | 4 | 6 | 3 | 4 | 5 | 6 |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Cecum | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum | M | | | | | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | A | A | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pancreas | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Acinar Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | X |
| Salivary Glands | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Forestomach | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Stomach, Glandular | A | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Tongue | | | | | | | + | | | | | | | | | | | | | | |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | A | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | | | | X |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/17/2014

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 12:52:52

CAS Number: 446-72-0

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 100PPM TO CTL**

* ..Total animals with tissue examined microscopically; Total animals with tumor

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 Time Report Requested: 12:52:52
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male F3 100PPM TO CTL | DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 3 5 5 5 5 5 5 6 6 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 | | | | | | | | | | | | | | | | | | | | |
| | ANIMAL ID | 5 3 2 4 5 5 7 9 4 5 6 6 8 8 0 1 3 5 5 5 5 5 5 5 5 | | | | | | | | | | | | | | | | | | | | |
| | | 1 8 7 4 0 5 0 3 5 9 6 5 1 0 2 5 7 1 1 1 2 1 1 1 1 | | | | | | | | | | | | | | | | | | | | |
| | | 0 | | | | | | | | | | | | | | | | | | | | |
| | | 0 | | | | | | | | | | | | | | | | | | | | |
| | | 0 0 1 2 2 2 2 2 3 3 3 4 4 4 4 7 9 9 9 9 9 9 9 9 | | | | | | | | | | | | | | | | | | | | |
| Prostate, Ventral Lobe | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | |
| Rete Testes | M | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + |
| Seminal Vesicle | M | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | |
| Sarcoma, Metastatic, Uncertain Primary Site | | | | | | | | | | | | | | | | | | | | | | |
| Testes | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Thymus | M | + | + | + | + | + | + | + | + | + | + | + | M | + | M | + | M | + | + | + | + | I |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | A | + | + | + | A | I | + | M | I | I | + | + | + | I | + | + | + | + | I | + | + | + |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | X | | | |
| Skin | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lipoma | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | X | | | X | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

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 Lab: NCTR

CD Rat Male
F3 100PPM TO CTL

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | |
|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 3 | 2 | 4 | 5 | 5 | 7 | 9 | 4 | 5 | 6 | 6 | 8 | 8 | 0 | 1 | 3 | 5 | 5 | 5 |
| | 1 | 8 | 7 | 4 | 0 | 5 | 0 | 3 | 5 | 9 | 6 | 5 | 1 | 0 | 2 | 5 | 7 | 1 | 1 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 0 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 | 4 | 7 | 9 | 9 | 9 | 9 | 9 | 9 |
| 1 | 8 | 8 | 8 | 0 | 0 | 1 | 2 | 7 | 6 | 8 | 0 | 0 | 3 | 4 | 8 | 3 | 4 | 8 | 8 | 9 |
| 6 | 9 | 8 | 8 | 3 | 7 | 4 | 8 | 9 | 7 | 6 | 2 | 3 | 7 | 0 | 1 | 4 | 6 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

Musculoskeletal System

Bone, Femur

+

Nervous System

Brain, Brain Stem

A

Brain, Cerebellum

A

Brain, Cerebrum

A

Respiratory System

Lung

A

Nose

+

Squamous Cell Carcinoma

X

Trachea

+

Special Senses System

Eye

A

Harderian Gland

A

Lacrimal Gland

+

Zymbal's Gland

+

Adenoma

X

Urinary System

Kidney

A

Urethra

+

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/17/2014

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 12:52:52

CAS Number: 446-72-0

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 100PPM TO CTL**

Urinary Bladder

SYSTEMIC LESIONS

Multiple Organ

Histiocytic Sarcoma

Leukemia Mononuclear

X

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

| ..Insufficient tissue

Page 24

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
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P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:52
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Male
F3 100PPM TO CTL

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | |
|-------------|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 5 | 5 5 5 5 4 4 4 5 5 5 5 5 6 5 5 5 5 6 4 6 | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 0 | | | | | | | | | | | | | | | | |
| ANIMAL ID | 1 | 1 | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 1 | | | | | | | | | | | | | | | | |
| ANIMAL ID | 5 5 5 5 6 6 6 7 8 8 8 8 8 4 4 4 4 4 4 4 4 | 5 5 5 5 6 6 6 7 8 8 8 8 8 4 4 4 4 4 4 4 4 | | | | | | | | | | | | | | | | |
| ANIMAL ID | 4 5 6 6 7 8 9 0 1 3 6 3 4 5 6 7 5 6 6 1 | 4 5 6 6 7 8 9 0 1 3 6 3 4 5 6 7 5 6 6 1 | | | | | | | | | | | | | | | | |
| | | *TOTALS | | | | | | | | | | | | | | | | |

Alimentary System

| | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | 45 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Acinar Cell, Adenoma | | | | | | | | X | | | | | | | | | | | 2 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Tongue | | | | | | | | | | | | | | | | | | | 1 |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

Endocrine System

| | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Adenoma | | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:52

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 100PPM TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | | |
| | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 5 | 6 | 4 | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| 5 | 5 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 8 | 8 | 4 | 4 | 4 | 4 | 4 | 8 | 8 | 1 | |
| 4 | 5 | 6 | 6 | 7 | 8 | 9 | 0 | 1 | 3 | 6 | 3 | 4 | 5 | 6 | 7 | 5 | 6 | 1 | |

| | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | X | | | 4 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Adenoma | | | | | | | | | | | | | | | X | | | 2 |
| Carcinoma | | | | | | | | | | | | | | | | X | | 1 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Adenoma | | | | | | | | | | | | | | | X | | | 1 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | 48 |
| Pars Distalis, Adenoma | X | | X | X | X | | | | | X | X | | | | X | | | 17 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |

General Body System

NONE

Genital System

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Coagulating Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Sarcoma, Metastatic, Uncertain Primary Site | X | | | | | | | | | | | | | | | | | 1 |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Carcinoma | | | | | | | | | | | | | | | | X | | 1 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | X | | | 5 |
| Prostate | | | | | | | | | | | | | | | | + | | 6 |
| Prostate, Dorsal Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Sarcoma, Metastatic, Uncertain Primary Site | X | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:52

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 100PPM TO CTL**

| | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|---|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 6 | 4 | 6 | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| | | 5 | 5 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 8 | 8 | 4 | 4 | 4 | 4 | 4 | 8 | 8 | |
| | | 4 | 5 | 6 | 6 | 7 | 8 | 9 | 0 | 1 | 3 | 6 | 3 | 4 | 5 | 6 | 7 | 5 | 6 | 1 |
| Prostate, Ventral Lobe | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Adenoma | | | | | | | | | | | | | | | | | | | | 1 |
| Rete Testes | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Seminal Vesicle | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Adenoma | | | | | | | | | | | | | | | | | | | | 1 |
| Sarcoma | | | | | | | | | | | | | | | | | | | | 1 |
| Sarcoma, Metastatic, Uncertain Primary Site | | | | | | | X | | | | | | | | | | | | | 1 |
| Testes | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Lymph Node | | | | | | | + | + | + | | | | + | + | | | | | | 18 |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Thymus | | + | + | I | + | I | + | + | + | + | + | + | + | + | I | + | + | + | + | 41 |
| Integumentary System | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | 1 |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Lipoma | | | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Carcinoma | | | | | | | X | | | | | | | | | | | | | 3 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:53

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 100PPM TO CTL**

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | |
|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 5 | | | | | | | | | | | | | | | | | |
| | 5 5 5 5 4 4 4 5 5 5 5 5 6 5 5 6 5 5 6 4 6 | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | |
| | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 2 | | | | | | | | | | | | | | | | | |
| | 5 5 5 6 6 6 7 8 8 8 8 8 4 4 4 4 4 4 8 8 1 | | | | | | | | | | | | | | | | | |
| | 4 5 6 6 7 8 9 0 1 3 6 3 4 5 6 7 5 6 6 1 | | | | | | | | | | | | | | | | | |

TOTALS*Musculoskeletal System**

Bone, Femur + + + + + + + + + + + + + + + + + + + 48

Nervous System

Brain, Brain Stem + + + + + + + + + + + + + + + + + + + 48

Brain, Cerebellum + + + + + + + + + + + + + + + + + + + 48

Brain, Cerebrum + + + + + + + + + + + + + + + + + + + 48

Respiratory System

Lung + + + + + + + + + + + + + + + + + + + 47

Nose + + + + + + + + + + + + + + + + + + + 49

Squamous Cell Carcinoma + + + + + + + + + + + + + + + + + + + 1

Trachea + + + + + + + + + + + + + + + + + + + 48

Special Senses System

Eye + + + + + + + + + + + + + + + + + + + 38

Harderian Gland + + + + + + + + + + + + + + + + + + + 38

Lacrimal Gland + + + + + + + + + + + + + + + + + + + 2

Zymbal's Gland + + + + + + + + + + + + + + + + + + + 1

Adenoma + + + + + + + + + + + + + + + + + + + 1

Urinary System

Kidney + + + + + + + + + + + + + + + + + + + 47

Urethra + + + + + + + + + + + + + + + + + + + 2

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

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I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:53

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 100PPM TO CTL**

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | |
|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 5 | | | | | | | | | | | | | | | | | |
| | 5 5 5 4 4 4 5 5 5 5 5 6 5 5 5 6 4 4 4 6 | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | |
| | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 | | | | | | | | | | | | | | | | | |
| | 5 5 5 6 6 6 7 8 8 8 8 8 8 4 4 4 4 4 4 4 | | | | | | | | | | | | | | | | | |
| | 4 5 6 6 7 8 9 0 1 3 6 3 4 5 6 7 5 6 1 | | | | | | | | | | | | | | | | | |

***TOTALS**

Urinary Bladder

+ + + + + + + + M + + + + + + + + + + + + + + + 47

SYSTEMIC LESIONS

Multiple Organ

+ 49

Histiocytic Sarcoma

X 1

Leukemia Mononuclear

1

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**Test Compound:** Endocrine disruptor (Genistein)**CAS Number:** 446-72-0**Date Report Requested:** 10/17/2014**Time Report Requested:** 12:52:53**First Dose M/F:** NA / NA**Lab:** NCTR

| CD Rat Male F3 500PPM TO CTL | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 5 | 7 | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 0 | 9 | 8 | 9 | 2 | 4 | 1 | 4 | 9 | 6 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 4 | 4 | 4 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 5 | 8 | 9 | 0 | 8 | 2 | 3 | 4 | 5 | 7 | 3 | 3 | 8 | 8 | 8 | 8 | 0 | 0 | 1 | 1 | 5 | 5 | 6 |
| | | 7 | 9 | 4 | 9 | 0 | 9 | 5 | 3 | 6 | 7 | 6 | 4 | 5 | 3 | 6 | 7 | 8 | 9 | 7 | 8 | 9 | 0 | 1 | 2 | 3 |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | + | + | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Colon | + | + | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Rectum | + | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | + | + | + | A | A | A | A | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

Intestine Small, Ileum

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Intestine Small, Jejunum | A | + | + | A | A | A | A | + | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma, Metastatic, Pancreas | | | | | | | | X | | | | | | | | | | | | | | | | | | |

Hepatocellular Adenoma

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Pancreas | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma | | | | | X | | | | | | | | | | | | | | | | | | | | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Carcinoma, Metastatic, Pancreas | | | | | X | | | | | | | | | | | | | | | | | | | | | |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Blood Vessel | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Heart | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/17/2014

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 12:52:53

CAS Number: 446-72-0

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Male
F3 500PPM TO CTL

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 7 | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 9 | 8 | 9 | 2 | 4 | 1 | 4 | 9 | 6 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 4 | 4 | 4 |
| | 7 | 9 | 4 | 9 | 0 | 9 | 5 | 3 | 6 | 7 | 6 | 4 | 5 | 3 | 6 | 7 | 8 | 9 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 7 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 5 | 8 | 9 | 0 | 8 | 2 | 3 | 4 | 5 | 7 | 3 | 3 | 8 | 8 | 8 | 0 | 0 | 0 | 1 | 1 | 1 | 5 | 5 | 6 |
| | 7 | 9 | 4 | 9 | 0 | 9 | 5 | 3 | 6 | 7 | 6 | 4 | 5 | 3 | 6 | 7 | 8 | 9 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 7 |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Adrenal Cortex | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adrenal Medulla | + | + | A | + | A | M | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | M | + | M | + | M | + | M | + | + | + | + | + | M | + | + | |
| Pituitary Gland | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pars Distalis, Adenoma | | | | | | | | X | | | | | | | | | X | | | | | X | X | | | | |
| Pars Distalis, Adenoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thyroid Gland | + | + | + | + | A | A | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| C Cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |

General Body System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tissue NOS | | | | | | | | | | | | | | | | | | | | | | | | | | + | + |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Coagulating Gland | + | + | + | + | A | + | A | A | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Epididymis | + | + | + | + | + | A | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Preputial Gland | M | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Squamous Cell Carcinoma | | | | | | | | X | | | | | | | | | | | | | | | | | | | |
| Prostate | + | + | | | | | | A | | | | | | | | | | | | | | | | | | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:54
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Male F3 500PPM TO CTL | DAY ON TEST | DAY ON TEST | | | | | | | | | | | | | | | | | | | | |
|---|-------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 5 | 7 | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 0 | 9 | 8 | 9 | 2 | 4 | 1 | 4 | 9 | 6 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 2 | 1 | 1 | 4 |
| CD Rat Male F3 500PPM TO CTL | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| | | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 5 | 8 | 9 | 0 | 8 | 2 | 3 | 4 | 5 | 7 | 3 | 3 | 8 | 8 | 8 | 0 | 0 | 1 | 5 |
| | | 7 | 9 | 4 | 9 | 0 | 9 | 5 | 3 | 6 | 7 | 6 | 4 | 5 | 3 | 6 | 7 | 8 | 9 | 0 | 1 | 2 |
| Prostate, Dorsal Lobe | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | |
| Prostate, Ventral Lobe | | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | X |
| Rete Testes | | + | + | + | + | M | M | + | M | + | A | + | M | + | I | + | + | + | + | + | + | + |
| Seminal Vesicle | | + | + | + | + | A | A | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Testes | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | I | + | + | + | + | + |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | X | | | | |
| Lymph Node | | | | | | | | + | | | | | | | | | | | | | | |
| Lumbar, Squamous Cell Carcinoma, Metastatic, Preputial Gland | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric | | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen | | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | X | | | | | |
| Thymus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | I | + | + | + | + |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | I | + | I | + | + | I | + | A | + | I | A | + | + | + | + | + | I | + | + | + | + |
| Fibroadenoma | | | | | | | | | | | | | | | | | | | | | | X |
| Fibroma | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/17/2014

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 12:52:54

CAS Number: 446-72-0

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 500PPM TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 7 | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 9 | 8 | 9 | 2 | 4 | 1 | 4 | 9 | 6 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 2 | 1 | 1 | 4 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | | | | | X |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | | X |
| Neurofibrosarcoma | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | | | X |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | | | | + |
| Chordoma | | | | | | | | | | | | | | | | | | | | | X |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | | | X |
| Nervous System | | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Reticulosis Malignant | | | | | | | | | | | | | | | | | | | | | X |
| Brain, Cerebellum | + | + | A | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Reticulosis Malignant | | | | | | | | | | | | | | | | | | | | | X |
| Brain, Cerebrum | + | + | A | + | A | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Reticulosis Malignant | | | | | | | | | | | | | | | | | | | | | X |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | A | + | + | A | + | A | + | + | + | + | + | + | + | + | + | + | + |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | | | X |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

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**CD Rat Male
F3 500PPM TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | |
|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 7 | 0 | 2 | 3 | 5 | 0 | 2 | 2 | 2 | 3 | 4 | 7 | 1 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 0 | 9 | 8 | 9 | 2 | 4 | 1 | 4 | 9 | 6 | 8 | 1 | 9 | 3 | 1 | 1 | 1 | 2 | 1 | 1 |
| Nose | + | + | + | + | A | A | + | A | + | + | A | + | + | + | + | + | + | + | + | + |
| Adventitia, Squamous Cell Carcinoma | | | | | | | | | | | | | | | X | | | | | |
| Trachea | + | + | + | + | A | A | A | A | + | + | A | + | + | + | + | + | + | + | + | + |
| Special Senses System | | | | | | | | | | | | | | | | | | | | |
| Eye | + | | | | | | | | | | | | | | | | | | | |
| Adventitia, Squamous Cell Carcinoma | | | | | | | | | | | | | | | X | | | | | |
| Harderian Gland | + | | | | | | | | | | | | | | | | | | | |
| Adenoma | | | | | | | | | | | | | | | | | | | | X |
| Adventitia, Squamous Cell Carcinoma | | | | | | | | | | | | | | | X | | | | | |
| Lacrimal Gland | | | | | | | | | | | | | | | | + | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | A | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + |
| Adventitia, Carcinoma, Metastatic, Pancreas | | | | | | X | | | | | | | | | | | | | | |
| Transit Epithe, Papilloma | | | | | | | | | | | | | | | | | X | | | |
| Urethra | | | | | | | | | | | | | | | | | | | | + |
| Urinary Bladder | + | + | + | + | A | + | + | A | + | + | + | + | + | M | + | + | + | + | + | + |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Leukemia Granulocytic | | | | | X | | | | | | | | | | | | | | | |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | X | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

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CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:54

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 500PPM TO CTL**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 3 | 2 | 3 | 3 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | 8 | 8 | 8 | 0 | 0 | 4 | 4 | 5 | 5 | 5 | 5 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 1 |
| | 2 | 4 | 5 | 1 | 2 | 8 | 9 | 0 | 1 | 2 | 3 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 0 |

TOTALS*Alimentary System**

| | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | 38 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | 41 |
| Adenocarcinoma | | | | | | | | | | | | | | | X | | | | 1 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | 1 |
| Hepatocellular Adenoma | | | | | | | | | | X | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Carcinoma | | | | | | | | | | | | | | | | | | | 1 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | 1 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:54

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 500PPM TO CTL**

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| | 7 | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 5 | 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | | | | | | | | | | | | | | | | | |
| | 0 | 1 | | | | | | | | | | | | | | | | | |
| | 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 8 8 8 0 0 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | | | | | | | | | | | | | | | | | |
| | 2 4 5 1 2 8 9 0 1 2 3 7 8 9 0 1 2 3 0 | *TOTALS | | | | | | | | | | | | | | | | | |
| Endocrine System | | | | | | | | | | | | | | | | | | | |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Pheochromocytoma Benign | | | | | | | | | | | | | X | | | | | | 2 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Parathyroid Gland | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | 43 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Pars Distalis, Adenoma | | X | X | X | | | X | | X | X | X | | | | | | | | 14 |
| Pars Distalis, Adenoma, Multiple | | | | | | | X | | | | | | | | | | | | 1 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| C Cell, Adenoma | | | | | | | X | | | | | | | | | | | | 1 |
| C Cell, Carcinoma | | | | | | | | | | | | | | | | | | | 1 |
| General Body System | | | | | | | | | | | | | | | | | | | |
| Tissue NOS | | | | | | | | | | | | | | | | | | | 2 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | 1 |
| Genital System | | | | | | | | | | | | | | | | | | | |
| Coagulating Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Epididymis | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Preputial Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Squamous Cell Carcinoma | | | | | | X | | | X | | | | | | | | | | 3 |
| Prostate | | | | | | | | | | | | | | | | | | | 4 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

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CD Rat Male
F3 500PPM TO CTL

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 2 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 8 | 8 | 8 | 8 | 0 | 0 | 4 | 4 | 5 | 5 | 5 | 5 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 1 |
| 2 | 4 | 5 | 1 | 2 | 8 | 9 | 0 | 1 | 2 | 3 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 0 | 0 |
| Prostate, Dorsal Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | X | 1 |
| Prostate, Ventral Lobe | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Adenoma | | | | | | | | | | | | | | | | | | | 1 |
| Rete Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 |
| Seminal Vesicle | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Testes | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | 1 |
| Lymph Node | + | + | + | + | | | | | | | | | | | | | | + | 12 |
| Lumbar, Squamous Cell Carcinoma, Metastatic, Preputial Gland | | | | | X | | | | | | | | | | | | | | 1 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | 1 |
| Thymus | + | + | + | + | M | + | + | M | + | + | + | + | I | + | + | + | + | I | 44 |
| Integumentary System | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 |
| Fibroadenoma | | | | | X | | | | | | | | | | | | | | 2 |
| Fibroma | | | | | | X | | | | | X | | | | | | | | 2 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

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Test Compound: Endocrine disruptor (Genistein)

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First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Male
F3 500PPM TO CTL**

| | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|---------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 2 | 3 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | | | | 1 |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | 1 |
| Neurofibrosarcoma | | | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | | 1 |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | | | 1 |
| Chordoma | | | | | | | | | | | | | | | | | | | | 1 |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | 1 |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | | 1 |
| Nervous System | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Reticulosis Malignant | | | | | | | | | | | | | | | | | | | | 1 |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Reticulosis Malignant | | | | | | | | | | | | | | | | | | | | 1 |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Reticulosis Malignant | | | | | | | | | | | | | | | | | | | | 1 |
| Respiratory System | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

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**CD Rat Male
F3 500PPM TO CTL**

| | DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|---|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 2 | 3 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 45 |
| Adventitia, Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | 1 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 44 |
| Special Senses System | | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 39 |
| Adventitia, Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | 1 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 39 |
| Adenoma | | | | | | | | | | | | | | | | | | | | 1 |
| Adventitia, Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | 1 |
| Lacrimal Gland | | | | | | | | | | | | | | | | | | | | 1 |
| Urinary System | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Adventitia, Carcinoma, Metastatic, Pancreas | | | | | | | | | | | | | | | | | | | | 1 |
| Transit Epithe, Papilloma | | | | | | | | | | | | | | | | | | | | 1 |
| Urethra | | | | | | | | | | | | | | | | | | | | 1 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Leukemia Granulocytic | | | | | | | | | | | | | | | | | | | | 1 |
| Mesothelioma Malignant | | | | | | | | | | | | | | | | | | | | 1 |

END OF MALE DATA

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

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BLANK ..Not examined microscopically

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 Lab: NCTR

| CD Rat Female F3 0 PPM | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|---------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 8 | 8 | 0 | 8 | 8 | 9 | 1 | 1 | 3 | 5 | 6 | 7 | 9 | 0 | 0 | 0 | 0 | 2 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 9 | 6 | 0 | 4 | 4 | 0 | 2 | 3 | 0 | 8 | 1 | 7 | 5 | 1 | 6 | 8 | 7 | 5 | 4 | 4 | 1 | 1 | 0 | 2 | 2 | 5 | 4 | 4 | 5 | 5 |
| | | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | | | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Intestine Large, Rectum | | | | | | | | | | | | | | | | | | | | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Duodenum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Intestine Small, Ileum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

Fibrous Histiocytoma, Metastatic, Skin

X

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Oral Mucosa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | + | |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Pancreas | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

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Lab: NCTR

| CD Rat Female F3 0 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 8 | 8 | 0 | 8 | 8 | 9 | 1 | 1 | 3 | 5 | 6 | 7 | 9 | 0 | 0 | 0 | 2 | 3 | 3 | 5 | 5 |
| | | 9 | 6 | 0 | 4 | 4 | 0 | 2 | 3 | 0 | 8 | 1 | 7 | 5 | 1 | 6 | 8 | 7 | 5 | 4 | 1 | 1 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 6 | 7 | 8 | 8 | 9 | 9 | 9 | 9 | 0 |
| | | 3 | 4 | 5 | 5 | 5 | 7 | 0 | 1 | 4 | 9 | 9 | 3 | 6 | 8 | 2 | 2 | 2 | 3 | 4 | 4 | 5 |
| | | 5 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 2 | 7 | 8 | 6 | 2 | 4 | 0 |
| | | 1 | 0 | 2 | 2 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 0 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 0 |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pheochromocytoma Benign | | | | | | | | | | | | | X | | | | | | | | | |
| Islets, Pancreatic | | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | X | | | | | | | | |
| Parathyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pars Distalis, Adenoma | | | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | | + | + | + | M | M | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | + | | | | |
| Fibrous Histiocytoma, Metastatic, Skin | | | | | | | | | | | | | X | | | | | | | | | |
| Ovary | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Tubulostromal Carcinoma | | | | | | | | | | | | | | | | | | | | | | |
| Oviduct | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Uterus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma | | | | | | | | | | | | | | X | | | | | | | | |
| Polyp Stromal | | | | | | | X | X | | | | | X | | | X | | | | | | |
| Vagina | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:55
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Female F3 0 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 8 | 8 | 0 | 8 | 8 | 9 | 1 | 1 | 3 | 5 | 6 | 7 | 9 | 0 | 0 | 0 | 2 | 3 | 3 | 5 | 5 | |
| | | 9 | 6 | 0 | 4 | 4 | 0 | 2 | 3 | 0 | 8 | 1 | 7 | 5 | 1 | 6 | 8 | 7 | 5 | 4 | 4 | 1 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | |
| | | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 6 | 7 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | |
| | | 3 | 4 | 5 | 5 | 5 | 7 | 0 | 1 | 4 | 9 | 9 | 3 | 6 | 8 | 2 | 2 | 2 | 3 | 4 | 4 | 5 | |
| | | 5 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 2 | 7 | 8 | 6 | 2 | 4 | 0 | |

Hematopoietic System

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | + |
| Inguinal, Sarcoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | + |
| Lumbar, Fibrous Histiocytoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | X |
| Popliteal, Sarcoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | |
| Sarcoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Thymus | + | + | + | + | + | + | + | + | + | + | M | M | + | + | + | + | M | + | + | + | + | + | + | |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | X |
| Thymoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | |

Integumentary System

| | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | X |
| Adenocarcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | |
| Fibroadenoma | | | | | | | | | | | | | | | | | | | | | | | | X |
| Fibroadenoma, Multiple | | | X | X | X | | | X | X | | | | | | | X | X | | | X | X | X | X | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Fibrous Histiocytoma | | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/17/2014

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 12:52:56

CAS Number: 446-72-0

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female F3 0 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 8 | 8 | 0 | 8 | 8 | 9 | 1 | 1 | 3 | 5 | 6 | 7 | 9 | 0 | 0 | 0 | 0 | 2 | 3 | 3 | 5 | 5 | 5 | 5 |
| | | 9 | 6 | 0 | 4 | 4 | 0 | 2 | 3 | 0 | 8 | 1 | 7 | 5 | 1 | 6 | 8 | 7 | 5 | 4 | 4 | 1 | 1 | 0 | 2 |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 6 | 7 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 0 | 0 |
| | | 3 | 4 | 5 | 5 | 5 | 7 | 0 | 1 | 4 | 9 | 9 | 3 | 6 | 8 | 2 | 2 | 2 | 3 | 4 | 4 | 5 | 5 | 5 | 1 |
| | | 5 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 2 | 7 | 8 | 6 | 2 | 4 | 0 | 1 | 2 | 4 |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma | | X | | | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Bone, Joint | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebellum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Granular Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Brain, Cerebrum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Glioma Malignant, Mixed | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Fibrous Histiocytoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | | | | | | | | | | | | | | | | | | | | | | | | | + |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/17/2014

Test Type: SPECIAL STUDY

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 12:52:56

Route: DOSED FEED

CAS Number: 446-72-0

First Dose M/F: NA / NA

Species/Strain: Rat/CD

Lab: NCTR

| CD Rat Female F3 0 PPM | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 8 | 8 | 0 | 8 | 8 | 9 | 1 | 1 | 3 | 5 | 6 | 7 | 9 | 0 | 0 | 0 | 0 | 2 | 3 | 3 | 5 | 5 | 5 | 5 | 5 |
| | | 9 | 6 | 0 | 4 | 4 | 0 | 2 | 3 | 0 | 8 | 1 | 7 | 5 | 1 | 6 | 8 | 7 | 5 | 4 | 4 | 1 | 1 | 0 | 2 | 2 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| | | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 6 | 7 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 |
| | | 3 | 4 | 5 | 5 | 5 | 5 | 7 | 0 | 1 | 4 | 9 | 9 | 3 | 6 | 8 | 2 | 2 | 2 | 3 | 4 | 4 | 5 | 5 | 1 | 3 |
| | | 5 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 2 | 7 | 8 | 6 | 2 | 4 | 0 | 1 | 2 | 4 | 5 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Harderian Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Urinary System | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Renal Tubule, Adenoma | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| SYSTEMIC LESIONS | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Multiple Organ | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

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I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/17/2014

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 12:52:56

CAS Number: 446-72-0

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female F3 0 PPM | DAY ON TEST | 0 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | 7 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 5 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 4 5 5 5 5 5 5 5 5 5 6 6 6 6 4 4 4 3 2 5 5 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 0 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 0 0 0 0 0 1 1 1 1 5 5 5 5 6 6 6 6 6 9 9 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 3 4 5 8 9 0 1 2 3 6 7 8 9 0 1 2 3 4 4 5 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 42 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 51 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | A | + | + | + | + | + | + | 51 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |

Fibrous Histiocytoma, Metastatic, Skin

1

Oral Mucosa

1

Sarcoma

1

| | | | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |

Endocrine System

| | | | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/17/2014

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 12:52:56

CAS Number: 446-72-0

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female F3 0 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 4 | 4 | 4 | 3 | 2 | 5 | 5 | 5 | 4 | |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 8 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 9 | 9 | |
| | | 8 | 3 | 4 | 5 | 8 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 4 | 5 | |
| *TOTALS | | | | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | | | 2 |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Parathyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Pars Distalis, Adenoma | | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 41 | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | 49 | |
| Adenoma | | | | | | | | | | | | | | | | | | | X | | | 2 | |
| Fibrous Histiocytoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Ovary | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Tubulostromal Carcinoma | | | | | | | | | | | | | | | | | | | X | | | 1 | |
| Oviduct | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Uterus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 | |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | | | | 1 |
| Polyp Stromal | | | | | | | | | | | | | | | | | | | X | | | 5 | |
| Vagina | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 52 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/17/2014

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 12:52:56

CAS Number: 446-72-0

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female F3 0 PPM | DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | 7 | | | | | | | | | | | | | | | | | | | | |
| | | 5 | | | | | | | | | | | | | | | | | | | | |
| | | 4 5 5 5 5 5 5 5 5 5 6 6 6 6 4 4 4 3 2 5 5 5 4 | | | | | | | | | | | | | | | | | | | | |
| | | 0 | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | | 1 | | | | | | | | | | | | | | | | | | | | |
| | | 0 1 | | | | | | | | | | | | | | | | | | | | |
| | | 8 0 0 0 0 0 0 1 1 1 1 5 5 5 5 6 6 6 6 6 6 6 9 9 | | | | | | | | | | | | | | | | | | | | |
| | | 8 3 4 5 8 9 0 1 2 3 6 7 8 9 0 1 2 3 4 4 5 6 | | | | | | | | | | | | | | | | | | | | |
| *TOTALS | | | | | | | | | | | | | | | | | | | | | | |

Hematopoietic System

| | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Lymph Node | + | | | | | | | | | | | | | | | | | | | | | 18 |
| Inguinal, Sarcoma, Metastatic, Skin | | | | | | | | | | | | | | | X | | | | | | | 1 |
| Lumbar, Fibrous Histiocytoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | | 1 |
| Popliteal, Sarcoma, Metastatic, Skin | | | | | | | | | | | | | | | X | | | | | | | 1 |
| Sarcoma, Metastatic, Skin | | | | | | | | | | | | | | | X | | | | | | | 1 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | M | M | + | + | + | 48 |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | 1 |
| Thymoma Malignant | | | | | | | X | | | | | | | | | | | | | | | 1 |

Integumentary System

| | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Adenocarcinoma | | | | | | | X | | | | | | | | X | | | | | | | 5 |
| Adenocarcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | 2 |
| Fibroadenoma | | X | | X | | | | | | | | | | | X | | X | X | X | X | X | 9 |
| Fibroadenoma, Multiple | X | X | X | X | X | X | X | X | | | | | | | X | X | X | X | X | X | X | 23 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 53 |
| Fibrous Histiocytoma | | | | | | | | | | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/17/2014

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 12:52:56

CAS Number: 446-72-0

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female F3 0 PPM | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|----|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 4 | 4 | 4 | 3 | 2 | 5 | 5 | 4 | |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | | 8 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 9 | 9 | |
| | | 8 | 3 | 4 | 5 | 8 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 4 | 5 |
| | | | | | | | | | | | | | | | | | | | | *TOTALS | | |
| Sarcoma | | | | | | | | | | | | | | | | | | | | X | 1 | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | 1 | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | |
| Bone, Femur | | | | | | | | | | | | | | | | | | | | | 53 | |
| Bone, Joint | | | | | | | | | | | | | | | | | | | | | 1 | |
| Skeletal Muscle | | | | | | | | | | | | | | | | | | | | | 1 | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | | | | | | | | | | | | | | | | | | | | | 53 | |
| Brain, Cerebellum | | | | | | | | | | | | | | | | | | | | | 53 | |
| Granular Cell Tumor Benign | | | | | | | | | | | | | | | | | | | | | 1 | |
| Brain, Cerebrum | | | | | | | | | | | | | | | | | | | | | 53 | |
| Glioma Malignant, Mixed | | | | | | | | | | | | | | | | | | | | | 1 | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | | | | | | | | | | | | | | | | | | | | 53 | |
| Fibrous Histiocytoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | | | | 1 | |
| Nose | | | | | | | | | | | | | | | | | | | | | 53 | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | 1 | |
| Trachea | | | | | | | | | | | | | | | | | | | | | 53 | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | | | | | | | | | | | | | | | | | | | | 43 | |
| Harderian Gland | | | | | | | | | | | | | | | | | | | | | 43 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/17/2014

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 12:52:57

CAS Number: 446-72-0

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female F3 0 PPM | DAY ON TEST | 0 | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|
| | | 7 | | | | | | | | | | | | | | | | | | | | |
| | | 5 | | | | | | | | | | | | | | | | | | | | |
| | | 4 5 5 5 5 5 5 5 5 5 6 6 6 6 4 4 4 3 2 5 5 4 | | | | | | | | | | | | | | | | | | | | |
| | | 0 | | | | | | | | | | | | | | | | | | | | |
| | | 1 | | | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | | 0 1 | | | | | | | | | | | | | | | | | | | | |
| | | 8 0 0 0 0 0 1 1 1 1 5 5 5 5 6 6 6 6 6 9 9 9 | | | | | | | | | | | | | | | | | | | | |
| | | 8 3 4 5 8 9 0 1 2 3 6 7 8 9 0 1 2 3 4 4 5 6 | | | | | | | | | | | | | | | | | | | | |
| *TOTALS | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | | + | | | | | | | | | | | | | | | | | | | | 43 |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | | | | | | | | | | | | | | | | | | | | 53 |
| Renal Tubule, Adenoma | | | | | | | | | | | | | | | | | | | | | | 1 |
| Urinary Bladder | | + | | | | | | | | | | | | | | | | | | | | 53 |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | + | | | | | | | | | | | | | | | | | | | | 53 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:57

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3 5PPM TO CTL

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 9 | 1 | 2 | 2 | 2 | 3 | 3 | 7 | 9 | 6 | 7 | 9 | 9 | 0 | 1 | 1 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 6 | 6 | 7 | 7 | 8 | 5 | 5 | 2 | 5 | 2 | 4 | 7 | 3 | 8 | 2 | 1 | 3 | 4 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 6 | 6 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | 1 | 4 | 7 | 8 | 8 | 9 | 9 | 9 | 4 | 7 | 9 | 3 | 2 | 2 | 1 | 2 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 1 | 1 | |
| | 5 | 3 | 3 | 2 | 4 | 3 | 6 | 7 | 9 | 5 | 9 | 2 | 1 | 6 | 9 | 8 | 2 | 0 | 3 | 3 | 4 | 5 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Intestine Large, Rectum | + | | | | | | | | | | | | | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Intestine Small, Jejunum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Leiomyosarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Cholangiocarcinoma | | | | | | | | | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| Mesentery | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | + |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Stomach | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Endocrine System

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:57
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Female F3 5PPM TO CTL | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | ANIMAL ID | 0 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 6 | 6 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| | | 1 | 4 | 7 | 8 | 8 | 9 | 9 | 9 | 4 | 7 | 9 | 3 | 2 | 2 | 1 | 2 | 3 | 4 | 4 | 5 | 5 | 6 |
| | | 5 | 3 | 3 | 2 | 4 | 3 | 6 | 7 | 9 | 5 | 9 | 2 | 1 | 6 | 9 | 8 | 2 | 0 | 3 | 3 | 4 | 5 |
| Adrenal Cortex | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | X | | | X | | | | | |
| Adrenal Medulla | | M | M | + | + | + | M | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | | | X | | |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | X |
| Parathyroid Gland | | M | + | + | + | + | + | + | + | M | + | + | + | + | M | M | M | M | + | + | + | + | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pars Distalis, Adenoma | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| Pars Distalis, Carcinoma | | | | | | | | | | | | | | | X | | | | | | | | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | | | | | | |
| C Cell, Carcinoma | | | | | | | | | | | | | | | | | | | | | | | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | | M | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | |
| Ovary | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Oviduct | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Uterus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leiomyoma | | | | | | | | | | | | | | | | | | | | | | | |
| Vagina | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:57

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3 5PPM TO CTL

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 9 | 1 | 2 | 2 | 2 | 3 | 3 | 7 | 9 | 6 | 7 | 9 | 9 | 0 | 1 | 1 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 6 | 6 | 7 | 7 | 8 | 5 | 5 | 2 | 5 | 4 | 7 | 3 | 8 | 2 | 1 | 3 | 4 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 3 | 4 | 6 | 6 | 7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 |
| | 1 | 4 | 7 | 8 | 8 | 9 | 9 | 9 | 4 | 7 | 9 | 3 | 2 | 2 | 1 | 2 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 1 | 1 |
| | 5 | 3 | 3 | 2 | 4 | 3 | 6 | 7 | 9 | 5 | 9 | 2 | 1 | 6 | 9 | 8 | 2 | 0 | 3 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 6 |

Hematopoietic System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leiomyosarcoma, Metastatic, Intestine Small, Jejunum | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Spleen

+

Thymus

+

Integumentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Mammary Gland | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma | | | | | | | | | | | X | | X | | | | | | | | | | | | | | | | | | |
| Adenocarcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fibroadenoma | | | | | | | | | | | X | | X | | X | X | X | | | | | | | | | | | | | | |
| Fibroadenoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

Musculoskeletal System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Nervous System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

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X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/17/2014

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 12:52:58

CAS Number: 446-72-0

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Female
F3 5PPM TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 4 | 9 | 1 | 2 | 2 | 2 | 3 | 3 | 7 | 9 | 6 | 7 | 9 | 9 | 0 | 1 | 1 | 3 | 3 | 5 | 5 | |
| | 6 | 6 | 7 | 7 | 8 | 5 | 5 | 2 | 5 | 2 | 4 | 7 | 3 | 8 | 2 | 1 | 3 | 4 | 8 | 1 | 1 | |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | X | | | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | |
| Eye | + | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | M | | | | | | | | | | | | | | | | | | | | | |
| Lacrimal Gland | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Urinary Bladder | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

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 Route: DOSED FEED
 Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:58
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Female
F3 5PPM TO CTL

| DAY ON TEST | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 3 | 3 | 3 | 3 | 3 | 6 | 6 | 6 | 8 | 9 | 9 | 9 | 9 | 9 | 1 | 1 | 1 | 6 | 6 |
| | 0 | 4 | 5 | 6 | 7 | 2 | 3 | 4 | 9 | 0 | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 5 | 6 |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Leiomyosarcoma | | | | | | | | | | | | | | | X | | | | 1 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Cholangiocarcinoma | | | | | | | | | | | | | | | | | | | 1 |
| Mesentery | | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach | | | | | | | | | | | | | | | | | | | 1 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | 49 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

Endocrine System

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

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Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:58
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Female
F3 5PPM TO CTL

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| 3 | 3 | 3 | 3 | 3 | 3 | 6 | 6 | 6 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 1 | 1 | 1 | 6 |
| 0 | 4 | 5 | 6 | 7 | 2 | 3 | 4 | 9 | 0 | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 5 | 6 | 6 |

| | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | 2 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 46 |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | | | | 1 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | | | | | | | | | | | | | 2 |
| Parathyroid Gland | + | + | + | + | M | + | M | + | + | + | + | + | + | + | + | + | + | + | 41 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pars Distalis, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 42 |
| Pars Distalis, Carcinoma | | | | | | | | | | | | | | | | | | | 1 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | | 1 |
| C Cell, Carcinoma | | | | | | | | | | | | | | | | | | | 1 |

General Body System

NONE

Genital System

| | | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leiomyoma | | | | | | | | | | | | | | | | | | X | 1 |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

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First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3 5PPM TO CTL

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | |
|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 4 5 | | | | | | | | | | | | | | | | | |
| | 2 5 5 5 5 5 5 5 6 5 5 5 5 4 4 5 4 4 5 4 4 | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | |
| | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 | | | | | | | | | | | | | | | | | |
| | 3 3 3 3 3 6 6 6 8 9 9 9 9 9 9 1 1 1 1 6 6 | | | | | | | | | | | | | | | | | |
| | 0 4 5 6 7 2 3 4 9 0 1 2 3 4 4 5 6 5 6 6 6 | | | | | | | | | | | | | | | | | |

*TOTALS

Hematopoietic System

| | | | | | | | | | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | | | | | | | | | | | | | | | | | | | 9 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leiomyosarcoma, Metastatic, Intestine Small, Jejunum | | | | | | | | | | | | | | | | | | X | 1 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | 45 |

Integumentary System

| | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | X | 6 |
| Adenocarcinoma, Multiple | | | | | | | | | | | | | | | | | | | 2 |
| Fibroadenoma | | | | | | | | | | | | | | | | | | X X | 9 |
| Fibroadenoma, Multiple | | | | | | | | | | | | | | | | | | | 11 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

Musculoskeletal System

| | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

Nervous System

| | | | | | | | | | | | | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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F3 5PPM TO CTL

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|------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 4 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 6 | 6 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 1 | 1 | 1 | 6 |
| | 0 | 4 | 5 | 6 | 7 | 2 | 3 | 4 | 9 | 0 | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 5 | 6 | 6 |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Respiratory System | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | 1 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Special Senses System | | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 41 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 |
| Lacrimal Gland | | | | | | | | | | | | | | | | | | | | 1 |
| Urinary System | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | 47 |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Leukemia Mononuclear | | | | | | | X | | | | | | | | | | | | | 1 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/17/2014

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 12:52:58

CAS Number: 446-72-0

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Female
F3 100PPM TO CTL**

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 7 | 5 | 8 | 0 | 0 | 1 | 1 | 3 | 4 | 4 | 6 | 7 | 7 | 8 | 8 | 8 | 1 | 2 | 2 | 3 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 5 | 9 | 8 | 5 | 5 | 6 | 8 | 5 | 1 | 8 | 5 | 4 | 8 | 3 | 6 | 8 | 2 | 0 | 8 | 6 | 4 | 1 | 0 | 1 | 1 | 1 | 1 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | |
| 0 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | |
| 9 | 2 | 6 | 9 | 9 | 1 | 1 | 5 | 5 | 7 | 1 | 2 | 2 | 4 | 5 | 5 | 3 | 3 | 3 | 4 | 4 | 6 | 6 | 1 | 1 | 2 | 2 | 2 | |
| 5 | 2 | 6 | 2 | 3 | 3 | 4 | 5 | 8 | 3 | 2 | 3 | 6 | 2 | 4 | 6 | 1 | 5 | 7 | 5 | 9 | 3 | 4 | 8 | 9 | 0 | 1 | 2 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Rectum | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Ileum | + | + | + | + | + | A | A | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Jejunum | + | + | + | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

Hepatocellular Adenoma

Mesentery

Oral Mucosa

Pancreas

Salivary Glands

Stomach, Forestomach

Stomach, Glandular

Cardiovascular System

Blood Vessel

Heart

Schwannoma Nos

Endocrine System

+

+

X

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:59
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Female
F3 100PPM TO CTL

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | |
|----------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 7 | 5 | 8 | 0 | 0 | 1 | 1 | 3 | 4 | 4 | 6 | 7 | 7 | 8 | 8 | 1 | 2 | 2 | 3 | 4 |
| | 5 | 9 | 8 | 5 | 5 | 6 | 8 | 5 | 1 | 8 | 5 | 4 | 8 | 3 | 6 | 8 | 2 | 0 | 8 | 6 |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | | | |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | | | X |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Pars Distalis, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| General Body System | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenoma | | | | | | | | | | | | | | | | | | | | |
| Carcinoma | | | | | | | | | | | | | | | | | | | | |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Oviduct | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | | X |
| Adenoma | | | | | | | | | | | | | | | | | | | | |
| Polyp Stromal | | | | | | | | | | | | | | | X | | | | | |
| Sarcoma Stromal | | | | | | | | | | | | | | | | | | | X | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
 Route: DOSED FEED
 Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:59
 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Female
F3 100PPM TO CTL

| | DAY ON TEST | CD Rat Female | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-------------|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 3 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 7 | 5 | 8 | 0 | 0 | 1 | 1 | 3 | 4 | 4 | 6 | 7 | 7 | 8 | 8 | 8 | 1 | 2 | 2 | 3 | 4 | 5 |
| | 5 | 9 | 8 | 5 | 5 | 6 | 8 | 5 | 1 | 8 | 5 | 4 | 8 | 3 | 6 | 8 | 2 | 0 | 8 | 6 | 4 | 1 |
| Vagina | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node | | + | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Thymus | | M | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Adenocarcinoma | | | | | X | X | | | | | | | | | | | | | | | | X |
| Adenocarcinoma, Multiple | | | | | | X | | | | | | | | | | | | | | | | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | X |
| Fibroadenoma | | | | | | | | X | X | X | X | | | | X | X | X | X | | X | | X |
| Fibroadenoma, Multiple | | | | | | | | | X | X | X | X | | | | X | X | X | X | | X | X |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | |
| Bone | | | | | | | | | | | | | | | | | | | | | | + |
| Bone, Femur | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | |
| Brain | | | | | | | | | | | | | | | | | | | | | | + |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:59

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Female
F3 100PPM TO CTL**

| | DAY ON TEST | CD Rat Female | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-------------|---------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 3 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | | 7 | 5 | 8 | 0 | 0 | 1 | 1 | 3 | 4 | 4 | 6 | 7 | 7 | 8 | 8 | 8 | 1 | 2 | 2 | 3 | 4 | 5 | 5 | 5 | 5 | 5 | |
| | | 5 | 9 | 8 | 5 | 5 | 6 | 8 | 5 | 1 | 8 | 5 | 4 | 8 | 3 | 6 | 8 | 2 | 0 | 8 | 6 | 4 | 1 | 0 | 1 | 1 | 1 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | |
| | | 9 | 2 | 6 | 9 | 9 | 1 | 1 | 5 | 5 | 7 | 1 | 2 | 2 | 4 | 5 | 5 | 3 | 3 | 3 | 4 | 4 | 6 | 6 | 1 | 1 | 2 | |
| | | 5 | 2 | 6 | 2 | 3 | 3 | 4 | 5 | 8 | 3 | 2 | 3 | 6 | 2 | 4 | 6 | 1 | 5 | 7 | 5 | 9 | 3 | 4 | 8 | 9 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Brain, Brain Stem | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Brain, Cerebellum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Brain, Cerebrum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Harderian Gland | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Renal Tubule, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary Bladder | | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Leukemia Mononuclear | | X | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:59

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3 100PPM TO CTL

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | |
|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 5 | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | |
| | 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | | | | | | | | | | | | | |
| | 3 3 4 0 1 1 1 2 2 2 2 2 2 2 2 2 2 5 6 6 9 | | | | | | | | | | | | | | | | | |
| | 8 9 0 6 7 8 9 0 1 2 3 6 7 8 9 5 7 8 7 | | | | | | | | | | | | | | | | | |

*TOTALS

Alimentary System

| | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

Hepatocellular Adenoma

X

1

Mesentery

1

Oral Mucosa

1

Pancreas

+

50

Salivary Glands

+

50

Stomach, Forestomach

+

49

Stomach, Glandular

+

50

Cardiovascular System

| | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Schwannoma Nos | | | | | | | | | | | | | | | | | | 1 |

Endocrine System

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
 Test Type: SPECIAL STUDY
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Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
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 First Dose M/F: NA / NA
 Lab: NCTR

CD Rat Female
F3 100PPM TO CTL

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|----------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 6 | 6 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 3 | 3 | 4 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 6 | 6 | 9 |
| 8 | 9 | 0 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 8 | 9 | 5 | 7 | 8 | 7 | 7 |
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | X | | | | | | | | | | | | 1 |
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenoma | | | | | | | X | | | | | | | | | | | | 2 |
| Parathyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 47 |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Pars Distalis, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 42 |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| General Body System | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenoma | | | | | | | | | | | | | | | | X | | | 1 |
| Carcinoma | | | | | | | X | | | | | | | | | | | | 1 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma | | | | | | | | | | | | | | | | | | | 1 |
| Adenoma | | | | | | | | | | | | | | | X | | | | 1 |
| Polyp Stromal | | | | | | | | | | | | | | X | X | X | | | 5 |
| Sarcoma Stromal | | | | | | | | | | | | | | X | | | | | 2 |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:59

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3 100PPM TO CTL

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | |
|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 5 | | | | | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | | | | | | |
| | 1 | | | | | | | | | | | | | | | | | |
| | 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | | | | | | | | | | | | | |
| | 3 3 4 0 1 1 1 2 2 2 2 2 2 2 2 2 2 2 5 6 6 9 | | | | | | | | | | | | | | | | | |
| | 8 9 0 6 7 8 9 0 1 2 3 6 7 8 9 5 7 8 7 8 7 | | | | | | | | | | | | | | | | | |

***TOTALS**

| | | | | | | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

Hematopoietic System

| | | | | | | | | | | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node | | | | | | | | | | | | | | | | | | 8 |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | 46 |

Integumentary System

| | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma | X | | | | | | | | X | X | X | | | | | | X | 8 |
| Adenocarcinoma, Multiple | | | | | | | | | X | X | X | | | | | | | 2 |
| Adenoma | | | | | | | | | | | | | | | | | | 1 |
| Fibroadenoma | X | X | X | | | | | | X | | X | | | | | | X | 13 |
| Fibroadenoma, Multiple | | | | X | | | | | X | X | X | X | X | X | X | X | X | 20 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

Musculoskeletal System

| | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone | | | | | | | | | | | | | | | | | | 1 |
| Bone, Femur | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |

Nervous System

| | | | | | | | | | | | | | | | | | | |
|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Brain | | | | | | | | | | | | | | | | | | 1 |
|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:52:59

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3 100PPM TO CTL

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | *TOTALS |
|------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---------|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| ANIMAL ID | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | |
| | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 6 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 3 | 3 | 4 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 6 | 6 | |
| | 8 | 9 | 0 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 6 | 7 | 8 | 9 | 5 | 7 | 8 | 7 | |
| Brain, Brain Stem | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Brain, Cerebellum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Brain, Cerebrum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 | |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 40 | |
| Urinary System | | | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Renal Tubule, Adenoma | | | | | | | | | | | | | | | | | | | X | 1 |
| Urinary Bladder | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | 48 | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Leukemia Mononuclear | | | | | | | | | | | | | | | | | | | 1 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

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Experiment Number: 99930-93
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Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014
 Time Report Requested: 12:52:59
 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Female F3 500PPM TO CTL | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-----------------------------------|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 2 | 9 | 9 | 2 | 2 | 4 | 5 | 8 | 9 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 9 | 0 | 0 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 4 | 4 | 5 | 5 | 7 | 7 | 9 | 9 | 1 | 1 | 0 | 0 | 5 | 8 | 7 | 9 | 6 | 9 | 6 | 7 | 7 | 6 | 2 | 6 | 1 | 1 | 1 | 1 | 2 |
| | | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Alimentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Large, Rectum | | | | | | | | | | | | | | | | | + | + | + | + | M | + | + | + | + | + | + | + | + | + | |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Ileum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Intestine Small, Jejunum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

Oral Mucosa

Sarcoma X

Pancreas

Salivary Glands

Stomach, Forestomach

Stomach, Glandular

Cardiovascular System

Blood Vessel

Heart

Endocrine System

Adrenal Cortex

Adenoma

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93
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 First Dose M/F: NA / NA
 Lab: NCTR

| CD Rat Female F3 500PPM TO CTL | DAY ON TEST | DAY ON TEST | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|-------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | |
| | | 2 | 9 | 9 | 2 | 2 | 4 | 5 | 8 | 9 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 9 | 0 | |
| | | 4 | 4 | 5 | 5 | 7 | 7 | 9 | 9 | 1 | 1 | 0 | 0 | 5 | 8 | 7 | 9 | 6 | 7 | 7 | 6 | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 6 | 8 | 9 | |
| | | 6 | 4 | 4 | 8 | 8 | 0 | 2 | 6 | 7 | 4 | 7 | 7 | 1 | 1 | 1 | 2 | 5 | 5 | 2 | 6 | |
| | | 7 | 1 | 2 | 1 | 3 | 5 | 3 | 0 | 6 | 0 | 1 | 5 | 1 | 4 | 5 | 6 | 8 | 2 | 5 | 1 | |
| Adrenal Medulla | | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | M | + | + | + | |
| Pheochromocytoma Benign | | | | | | | | | | | | | X | | | | | | | | | |
| Islets, Pancreatic | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | |
| Parathyroid Gland | | + | M | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | |
| Pituitary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Pars Distalis, Adenoma | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |
| Thyroid Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | |
| C Cell, Adenoma | | | | | | | | | | | | | | | | | | | | X | X | |
| General Body System | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | | | | | | | | | | | | | | | | | | | | | | |
| Clitoral Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | |
| Ovary | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | |
| Yolk Sac Carcinoma | | | | | | | | | | | | | | | | | | | X | | | |
| Oviduct | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | |
| Uterus | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | |
| Polyp Stromal | | | | | | | | | | | | | | | | | | | X | | | |
| Vagina | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | |
| Hematopoietic System | | | | | | | | | | | | | | | | | | | | | | |
| Bone Marrow | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

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|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | ANIMAL ID | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | |
| | | 2 | 9 | 9 | 2 | 2 | 4 | 5 | 8 | 9 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 9 | 0 | 0 | 3 | 3 | 5 | 5 | |
| | | 4 | 4 | 5 | 5 | 7 | 7 | 9 | 9 | 1 | 1 | 0 | 0 | 5 | 8 | 7 | 9 | 6 | 9 | 6 | 7 | 7 | 6 | 2 | 6 | 1 | |
| Lymph Node | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lumbar, Yolk Sac Carcinoma, Metastatic, | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ovary | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal, Yolk Sac Carcinoma, Metastatic, | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ovary | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | |
| Lymph Node, Mesenteric | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | |
| Spleen | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | |
| Thymus | | + | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | M | M | + | + | + | + | + | + | + | |
| Thymoma Malignant | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Integumentary System | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mammary Gland | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Adenocarcinoma | | X | | | | | X | | X | X | | | | | | | | | | | | X | X | | | | X |
| Adenocarcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fibroadenoma | | | | | | | | | | X | X | | X | X | | X | X | X | X | X | X | X | | X | X | X | |
| Fibroadenoma, Multiple | | | | | | | | | | | | X | | | | | | | | | | X | | X | | X | X |
| Skin | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:53:00

First Dose M/F: NA / NA

Lab: NCTR

| CD Rat Female F3 500PPM TO CTL | DAY ON TEST | Day On Test | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 |
| | | 2 | 9 | 9 | 2 | 2 | 4 | 5 | 8 | 9 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 9 | 0 | 3 | 5 |
| | | 4 | 4 | 5 | 5 | 7 | 7 | 9 | 9 | 1 | 1 | 0 | 0 | 5 | 8 | 7 | 9 | 6 | 7 | 7 | 6 | 2 | 1 |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 6 | 8 | 9 | 9 | 9 |
| | | 6 | 4 | 4 | 8 | 8 | 0 | 2 | 6 | 7 | 4 | 7 | 7 | 1 | 1 | 1 | 2 | 5 | 5 | 2 | 6 | 2 | 3 |
| | | 7 | 1 | 2 | 1 | 3 | 5 | 3 | 0 | 6 | 0 | 1 | 5 | 1 | 4 | 5 | 6 | 8 | 2 | 5 | 5 | 1 | 7 |
| Bone, Femur | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | |
| Brain, Brain Stem | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | |
| Brain, Cerebellum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | |
| Brain, Cerebrum | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | |
| Carcinoma, Metastatic, Pituitary Gland | | X | | | | | | | | | | | | | | | | | | | | | |
| Granular Cell Tumor Benign | | | | | | | | | | | | | | | | | | X | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | |
| Lung | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | |
| Squamous Cell Carcinoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | X | | | | | |
| Nose | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | X | | | | | |
| Trachea | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | |
| Eye | | | | | | | + | | | | | | | | | | M | + | + | + | + | + | |
| Harderian Gland | | | | | | | + | | | | | | | | | | M | + | + | + | + | + | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | |
| Kidney | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | |
| Urinary Bladder | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | + | + | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

BLANK ..Not examined microscopically

I ..Insufficient tissue

Experiment Number: 99930-93

Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Date Report Requested: 10/17/2014

Test Compound: Endocrine disruptor (Genistein)

Time Report Requested: 12:53:01

CAS Number: 446-72-0

First Dose M/F: NA / NA

Lab: NCTR

CD Rat Female
F3 500PPM TO CTL

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| | 2 | 9 | 9 | 2 | 2 | 4 | 5 | 8 | 9 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 8 | 9 | 0 | 0 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 4 | 4 | 5 | 5 | 7 | 7 | 9 | 9 | 1 | 1 | 0 | 0 | 5 | 8 | 7 | 9 | 6 | 9 | 6 | 7 | 7 | 6 | 2 | 6 | 1 | 1 | 1 | 1 | 2 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 |
| 6 | 4 | 4 | 8 | 8 | 0 | 2 | 6 | 7 | 4 | 7 | 7 | 1 | 1 | 1 | 2 | 5 | 5 | 5 | 2 | 6 | 2 | 3 | 4 | 6 | 6 | 6 | 6 | 6 | 2 | 2 |
| 7 | 1 | 2 | 1 | 3 | 5 | 3 | 0 | 6 | 0 | 1 | 5 | 1 | 4 | 5 | 6 | 8 | 2 | 5 | 5 | 1 | 7 | 9 | 1 | 5 | 6 | 6 | 7 | 8 | 9 | 6 |

Multiple Organ

+ +

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CAS Number: 446-72-0

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First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Female
F3 500PPM TO CTL**

| DAY ON TEST | 0 | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|-------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 7 | | | | | | | | | | | | | | | | | |
| 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | | | | | | | | | | | | | | | | | | |
| 1 9 4 4 4 4 4 4 4 4 5 5 5 5 5 5 3 3 2 3 | | | | | | | | | | | | | | | | | | |
| ANIMAL ID | 0 | 1 | 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 | 2 2 4 4 4 6 9 9 9 0 2 2 6 7 7 7 7 7 7 7 9 | 8 9 1 2 3 5 5 6 7 4 5 9 0 1 2 3 4 8 | | | | | | | | | | | | | |
| | *TOTALS | | | | | | | | | | | | | | | | | |

Alimentary System

| | | | | | | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Esophagus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Large, Cecum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Colon | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Large, Rectum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 37 |
| Intestine Small, Duodenum | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Intestine Small, Ileum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Intestine Small, Jejunum | + | A | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Liver | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Oral Mucosa | | | | | | | | | | | | | | | | | | 1 |
| Sarcoma | | | | | | | | | | | | | | | | | | 1 |
| Pancreas | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Salivary Glands | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach, Forestomach | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Stomach, Glandular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

Cardiovascular System

| | | | | | | | | | | | | | | | | | | |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Blood Vessel | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Heart | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |

Endocrine System

| | | | | | | | | | | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Adrenal Cortex | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Adenoma | | | | | | | | | | | | | | X | | | 1 | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

+ ..Tissue examined microscopically

A ..Autolysis precludes evaluation

X ..Lesion present

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Experiment Number: 99930-93

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CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:53:01

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Female
F3 500PPM TO CTL**

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | *TOTALS |
|-------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---------|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 1 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 2 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 4 | 4 | 4 | 4 | 6 | 9 | 9 | 9 | 0 | 2 | 2 | 6 | 7 | 7 | 7 | 7 | 7 | 9 |
| 8 | 9 | 1 | 2 | 3 | 5 | 5 | 6 | 7 | 7 | 4 | 5 | 9 | 0 | 1 | 2 | 3 | 4 | 8 | |

| | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Adrenal Medulla | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 | |
| Pheochromocytoma Benign | | | | | | | | | | | | | | | | X | | | | 2 |
| Islets, Pancreatic | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| Adenoma | | | | | | | | | | | | | | | | | X | | | 1 |
| Parathyroid Gland | + | + | + | + | + | M | + | + | + | + | + | + | + | + | + | + | + | + | 46 | |
| Pituitary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 | |
| Pars Distalis, Adenoma | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | 40 | |
| Thyroid Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 | |
| C Cell, Adenoma | | | | | | | | | | | | | | | | X | | | 3 | |

General Body System

NONE

Genital System

| | | | | | | | | | | | | | | | | | | | |
|--------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Clitoral Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 48 |
| Ovary | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Yolk Sac Carcinoma | | | | | | | | | | | | | | | | | | | 1 |
| Oviduct | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Uterus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Polyp Stromal | | | | | | | | | | | | | | | | X | | | 2 |
| Vagina | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | + | 48 |

Hematopoietic System

| | | | | | | | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| Bone Marrow | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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Experiment Number: 99930-93

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CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:53:01

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Female
F3 500PPM TO CTL**

| DAY ON TEST | CD Rat Female F3 500PPM TO CTL | | | | | | | | | | | | | | | | | |
|---|--------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 1 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 2 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 2 | 2 | 4 | 4 | 4 | 6 | 9 | 9 | 9 | 0 | 2 | 2 | 6 | 7 | 7 | 7 | 7 | 9 |
| | 8 | 9 | 1 | 2 | 3 | 5 | 5 | 6 | 7 | 7 | 4 | 5 | 9 | 0 | 1 | 2 | 3 | 4 |
| | *TOTALS | | | | | | | | | | | | | | | | | |
| Lymph Node | + | + | + | + | + | + | + | + | + | + | + | + | + | M | + | + | 12 | |
| Lumbar, Yolk Sac Carcinoma, Metastatic, | | | | | | | | | | | | | | | | | | 1 |
| Ovary | | | | | | | | | | | | | | | | | | |
| Renal, Yolk Sac Carcinoma, Metastatic, | | | | | | | | | | | | | | | | | | 1 |
| Ovary | | | | | | | | | | | | | | | | | | |
| Lymph Node, Mandibular | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Lymph Node, Mesenteric | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Spleen | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Thymus | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 47 |
| Thymoma Malignant | | | | | | | | | | | | | | | | | | 1 |
| Integumentary System | | | | | | | | | | | | | | | | | | |
| Mammary Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Adenocarcinoma | | | | | | | | | X | | | | | X | | X | | 10 |
| Adenocarcinoma, Multiple | | | | | | | | | | X | | | | X | | | | 2 |
| Adenoma | | | | | | | | | | | | | | | | | | 1 |
| Fibroadenoma | | | X | | X | | | | | | | | | X | | X | | 19 |
| Fibroadenoma, Multiple | X | | | X | X | | X | | X | | | | | | X | | | 9 |
| Skin | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 50 |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | 1 |
| Sarcoma | | | | | | | | | | | | | | | | | | 1 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | 1 |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

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Lab: NCTR

**CD Rat Female
F3 500PPM TO CTL**

| DAY ON TEST | *TOTALS | | | | | | | | | | | | | | | | | |
|---|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ANIMAL ID | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 1 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 2 | 3 |
| Bone, Femur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nervous System | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Brain, Brain Stem | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brain, Cerebellum | 2 | 2 | 4 | 4 | 4 | 6 | 9 | 9 | 9 | 0 | 2 | 2 | 6 | 7 | 7 | 7 | 7 | 9 |
| Brain, Cerebrum | 8 | 9 | 1 | 2 | 3 | 5 | 5 | 6 | 7 | 7 | 4 | 5 | 9 | 0 | 1 | 2 | 3 | 4 |
| Carcinoma, Metastatic, Pituitary Gland | | | | | | | | | | | | | | | | | | 1 |
| Granular Cell Tumor Benign | | | | | | | | | | | | | | | | | | 1 |
| Respiratory System | | | | | | | | | | | | | | | | | | |
| Lung | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Squamous Cell Carcinoma, Metastatic, Skin | | | | | | | | | | | | | | | | | | 1 |
| Nose | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | X | X | | 3 |
| Trachea | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Special Senses System | | | | | | | | | | | | | | | | | | |
| Eye | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38 |
| Harderian Gland | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 38 |
| Urinary System | | | | | | | | | | | | | | | | | | |
| Kidney | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | 49 |
| Urinary Bladder | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | M | 47 |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | |

* ..Total animals with tissue examined microscopically; Total animals with tumor

M ..Missing tissue

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Test Type: SPECIAL STUDY

Route: DOSED FEED

Species/Strain: Rat/CD

P07: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Endocrine disruptor (Genistein)

CAS Number: 446-72-0

Date Report Requested: 10/17/2014

Time Report Requested: 12:53:01

First Dose M/F: NA / NA

Lab: NCTR

**CD Rat Female
F3 500PPM TO CTL**

| DAY ON TEST | Multiple Organ | | | | | | | | | | | | | | | | | |
|-------------|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 1 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 2 | 3 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 2 | 4 | 4 | 4 | 4 | 6 | 9 | 9 | 0 | 2 | 2 | 6 | 7 | 7 | 7 | 7 | 7 | 9 |
| 8 | 9 | 1 | 2 | 3 | 5 | 5 | 6 | 7 | 7 | 4 | 5 | 9 | 0 | 1 | 2 | 3 | 4 | 8 |

*TOTALS

50

** END OF REPORT **

* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically